

### **CLAIM AMENDMENTS**

This listing of claims will replace all prior versions, and listings, of claims in the application.

Claims 1 through 79 (Canceled).

80. (Withdrawn) A grafted antibody, or functional fragment thereof, comprising an association rate constant ( $k_{on}$ ) greater than  $1.4 \times 10^6 \text{ M}^{-1} \text{ sec}^{-1}$ .

81. (Withdrawn) The grafted antibody, or functional fragment thereof, of claim 80 further comprising an association constant ( $K_a$ ) greater than  $5 \times 10^9 \text{ M}^{-1}$ .

82. (Withdrawn) The grafted antibody, or functional fragment thereof, of claim 80, wherein said  $k_{on}$  is greater than  $2.7 \times 10^6 \text{ M}^{-1} \text{ sec}^{-1}$ .

83. (Withdrawn) The grafted antibody, or functional fragment thereof, of claim 82 further comprising an association constant ( $K_a$ ) greater than  $1.0 \times 10^{10} \text{ M}^{-1}$ .

84. (Withdrawn) The grafted antibody, or functional fragment thereof, of claim 80, comprising a humanized antibody, or functional fragment thereof.

85. (currently amended) A method for producing an enhanced antibody, or functional fragment thereof, comprising:

- (a) modifying a parent antibody, or functional fragment thereof;
- (b) obtaining one or more variant antibodies, or functional fragments thereof, said one or more variant antibodies, or functional fragments thereof, comprising one or more amino acid substitutions in one or more variable regions compared to said parent antibody, and
- (c) measuring the an association rate constant ( $k_{on}$ ) of said one or more variant antibodies, or functional fragments thereof, to an antigen, wherein a variant antibody, or functional fragment thereof, having an association rate to an antigen that is 4-fold higher or greater compared to the rate of said parent antibody binding to said antigen is an enhanced antibody, or functional fragment thereof.

86. (Original) The method of claim 85, further comprising isolating said enhanced antibody, or functional fragment thereof.

87. (Original) The method of claim 85, wherein said one or more amino acid substitutions are in one or more CDRs.

88. (Original) The method of claim 85, wherein said one or more amino acid substitutions are in one or more framework regions.

89. (Original) The method of claim 85, wherein said amino acid substitutions are in one or more CDRs and one or more framework regions.

90. (Original) The method of claim 85, wherein said enhanced antibody, or functional fragment thereof, has an association rate constant ( $k_{on}$ ) that is  $6.8 \times 10^5 \text{ M}^{-1} \text{ sec}^{-1}$  or higher.

91. (Original) The method of claim 90, wherein said enhanced antibody, or functional fragment thereof, has an association constant ( $K_a$ ) that is  $2.0 \times 10^9 \text{ M}^{-1}$  or higher.

92. (Original) The method of claim 85, wherein said enhanced antibody, or functional fragment thereof, is a grafted antibody, or functional fragment thereof.